

Amendments to the Claims:

1. (currently amended) A method for routing packets in a router having a plurality of router interfaces through which the packets are received from a plurality of address domains, the method comprising:
 - dedicating a separate routing table in the router to each address domain of the plurality of address domains;
 - associating each router interface with one of the routing tables;
 - ~~and~~
 - executing a single IP stack to receive a packet from any of the router interfaces and to identify the associated routing table in the router for handling the received packet and,
 - in the event of a route change received from more than one of the plurality of address domains, updating each routing table associated with each address domain for which a route change has been received via the single IP stack.
2. (canceled)
3. (previously presented) The method of claim 1, wherein a mapping array associates interfaces connecting to the same address domain with the same routing table.

4. (previously presented) The method of claim 1, wherein executing a single IP stack forwards a received packet according to the identified routing table when the received packet is a data packet and updates the identified routing table when the received packet is a control packet.
5. (canceled)
6. (original) The method of claim 1 wherein each of the plurality of address domains represents a virtual private network.

7. (currently amended) A router comprising:

a plurality of router interfaces through which packets from a plurality of address domains are received;

a separate routing table in the router associated with each address domain; and

a domain manager executing a single IP stack to receive a packet from any of the router interfaces and to identify an appropriate associated routing table in the router for handling the received packet-
the domain manager functional in the event of a route change received from more than one of the plurality of address domains to update each routing table associated with each address domain for which a route change has been received via the single IP stack.

8. (canceled)

9. (previously presented) The router of claim 7, wherein the domain manager comprises a mapping array that associates each interface to a routing table.

10. (previously presented) The router of claim 7, wherein the domain manager executing the single stack forwards a received packet according to the identified routing table when the received packet is a data packet

and updates the identified routing table when the received packet is a control packet.

11. (canceled)
12. (original) The router of claim 7 wherein each of the plurality of address domains represents a virtual private network.
- 13.- 20. (canceled).